

Abstract

Method for producing an LED light source comprising a luminescence conversion element

5 The invention describes a method for producing a light-emitting-diode (LED) light source, particularly comprising mixed-color LEDs, wherein at least a portion of primary radiation emitted by a chip is transformed by luminescence conversion. Said chip comprises a front-side (i.e., the side facing in the direction of radiation) electrical contact to whose surface a luminescence conversion material is applied in the form of a thin layer. Prior to coating, the
10 front-side electrical contact is raised by the application of an electrically conductive material to the electrical contact surface.

The method enables specific color coordinates to be adjusted selectively by monitoring the color coordinates (IEC chromaticity diagram) and thinning the layer of luminescence conversion material. In addition, the method is suited in particular for simultaneously producing a plurality
15 of LED light sources from a multiplicity of similar chips in a wafer composite.

Fig. 1d